Maryland Historical Trust

Maryland Inventory of Historic Properties number: HO-669

Name: Tiber Alley over Tiber River

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended ___X___ Eligibility Not Recommended _____

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: Anne E. Bruder Date: 3 April 2001

Reviewer, NR Program: Peter E. Kurtze Date: 3 April 2001

Maryland Inventory of Historic Properties MHT Number HO-669
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

Name and SHA No. Tiber Alley over Tiber River/HO 107

Location:
Street/Road Name and Number: Tiber Alley

City/Town: Ellicott City Vicinity _____

County: Howard

Ownership: __State_X County__Municipal__Other

This bridge projects over: __Road__Railway_X_Water__Land

Is the bridge located within a designated district: _X_yes_no
_X_NR listed district_NR determined eligible district
_locally designated_other
Name of District Ellicott City National Register Historic District

Bridge Type:
_Timber Bridge
_Beam Bridge _Truss-Covered _Trestle _Timber-and-Concrete

_Stone Arch

_Metal Truss

_Movable Bridge
_Swing _Bascule Single Leaf_Bascule Multiple Leaf
_Vertical Lift _Retractile_Pontoon

X_Metal Girder
_X_Rolled Girder _Rolled Girder Concrete Encased
_Plate Girder _Plate Girder Concrete Encased

_Metal Suspension

_Metal Arch

_Metal Cantilever

__Concrete
_Concrete Arch _Concrete Slab__Concrete Beam _Rigid Frame
_Other Type Name_____.

Description:

Describe Setting:

Bridge HO 107 carries Tiber Alley over the Tiber River in Ellicott City, Howard County, Maryland. Tiber Alley runs in a generally north-south direction at this location; the Tiber River runs generally east-west. The bridge is located in a small town with nineteenth-century domestic, commercial and industrial structures surrounding it. An adjoining nineteenth-century clapboard and stone structure serves as the east wall of the bridge, in place of a guardrail.

Describe Superstructure and Substructure:

The superstructure of HO 107 is a single span rolled steel beam structure constructed in 1935. The bridge has a span length of 34 feet, and an overall length of 38 feet. The bridge has a corrugated metal deck with a bituminous overlay. It has a metal guardrail on the west elevation. Bridge HO 107 has a clear roadway width of 16.66 feet, and an out-to-out width of 17 feet. The bridge has a sufficiency rating of 69.9.

The substructure is actually a channelized wall for the Tiber River, which has been channeled in this area. The cut stone used for this retaining wall is the same as that used in the construction of the surrounding structures. Therefore, it is highly likely that this wall's construction dates to the early-nineteenth century time period of the adjoining structures.

Discuss Major Alterations:

In 1984 the corrugated metal deck was replaced and the steel stringers were strengthened.

History:
When Built: 1935, deck replaced 1984
Why Built: Structure HO 107 was constructed to meet local transportation needs.
Who Built: Unknown
Why Altered: Structure HO 107 was altered to meet structural and safety needs.
Was this bridge built as part of an organized bridge building campaign: yes

Surveyor Analysis:

This bridge may have NR significance for association with:
_A Events _Person
_X_C Engineering/Architectural

Was this bridge constructed in response to significant events in Maryland or local history?

There has been a bridge of some type at this crossing of the Tiber River since the construction of the surrounding structures in the early-nineteenth century. Tiber Alley serves as an access road to approximately five structures. It is likely that a bridge was built here in direct response to the need for access to and from the newly constructed structures in the early-nineteenth century; or, a bridge was erected here to allow for construction of the structures on the other

side of the Tiber River. HO 107 is likely an early-twentieth-century replacement of a much earlier structure. In the early-twentieth century many less stable timber and stone structures were replaced with more stable steel beam bridges, capable of carrying much heavier traffic, such as automobiles and trucks. It is probable that HO 107 is a typical example of this surge of replacements in Howard County.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

It is not likely that construction of, or alterations to, HO 107 had a significant impact on the growth and development of the area because this bridge is an early-twentieth century replacement of an earlier structure. However, construction of the original structure certainly would have had a significant impact on the development of the area.

Is the bridge located in an area that may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district:

HO 107 is located in the Ellicott City National Register Historic District. Though the bridge post-dates the period of construction of the most of the district, the bridge blends in with the historic landscape, and does not detract from the visual or historic character of the district.

Is the bridge a significant example of its type?

Bridge HO 107 is a unique example of a steel beam bridge. The stone masonry walls of the channeled Tiber River act as the abutments for the bridge. The east side of the bridge rests on, but is not supported by, the iron supports of an adjoining stone and clapboard structure, the center of which spans the Tiber River as well. The unique engineering and construction features, combined with the fact that the alterations made to this bridge since 1935 have not been major structural repairs, cause this bridge to be considered a unique, and therefore significant example of its type.

Does the bridge retain integrity of the important elements described in the Context Addendum?

Longitudinal I-beams are considered a primary character defining element. There is no record in the county bridge inspection files of these beams ever having been replaced. However, it is noted that in 1984 the steel stringers were strengthened for structural support.

The bridge deck is considered a secondary character defining element. The county inspection files note that the corrugated metal deck was replaced and a new bituminous overlay was put down in 1984. It is probable that similar repairs have been made in the past, as well as cleaning, painting and guardrail replacement, although no record of that appears in the inspection reports.

Stone masonry abutments are considered primary character defining elements. Bridge HO 107 rests on stone masonry retaining walls. While not the typical style, these retaining walls act as abutments for the bridge. The retaining walls were put in when the Tiber River was channeled, sometime in the early-nineteenth century.

HO-669

Bridge HO 107 is currently in good condition. Repairs that have been made to the structure have been relatively minor or replacements in kind. The fact that the original substructure and the unique construction techniques have not been changed dramatically over the course of the last 100 plus years, leads to the conclusion that the bridge does retain a certain amount of integrity of the elements described in the Context Addendum.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer and why:

Yes, this bridge is a significant example of the work of the designer or engineer.

Should this bridge be given further study before significance analysis is made and why?

No, this bridge does not need to be given further study.

Bibliography:

Howard County Bridge Inspection Files

Spero, P.A.C. & Company, and Louis Berger & Associates **Historic Bridges in Maryland: Historic Bridge Context**, September 1994.

Surveyor:
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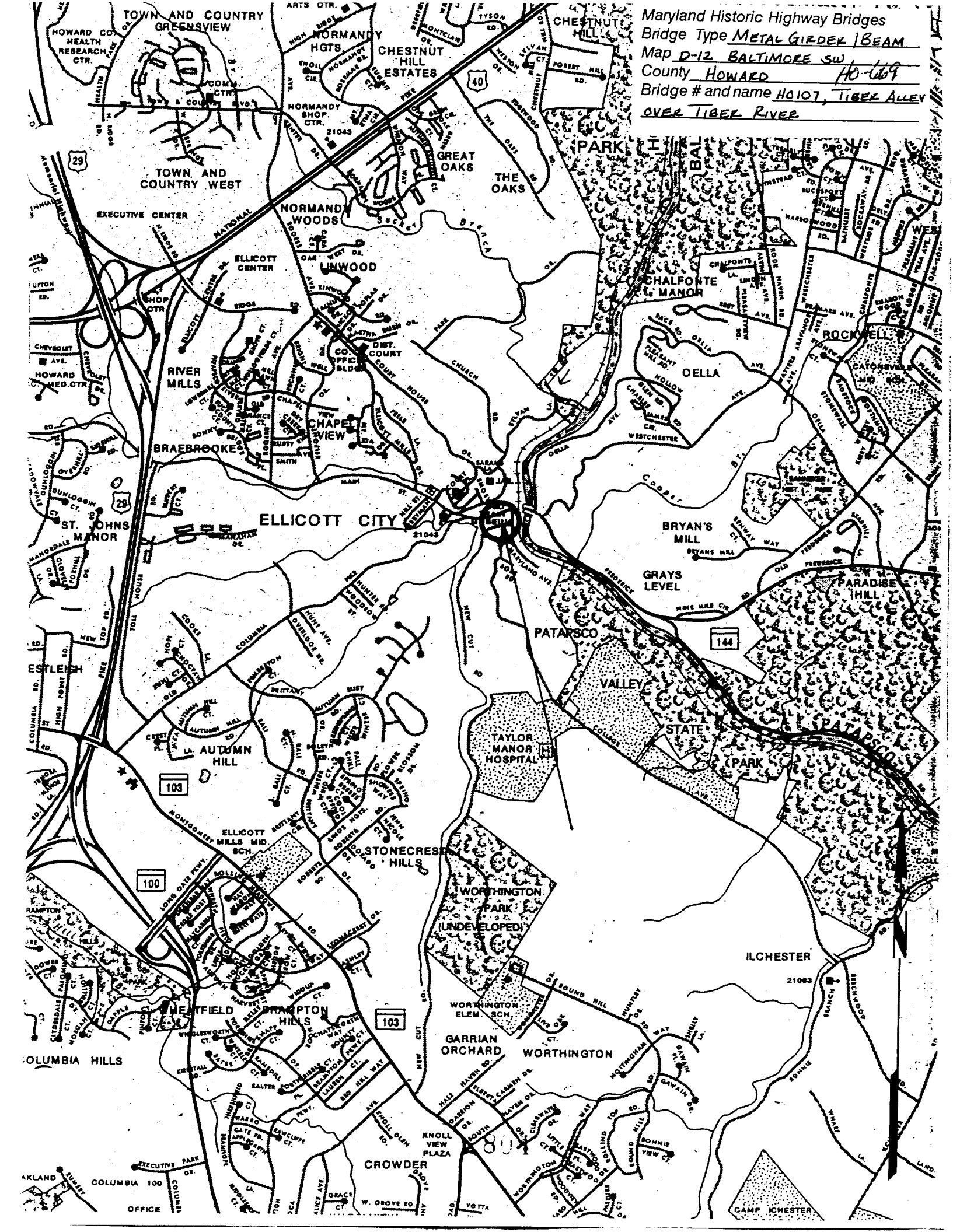
Revised by P.A.C. Spero & Company, July 1998


Maryland Historic Highway Bridges
Bridge Type METAL GIRDER / BEAM
Map D-12 BALTIMORE SW
County HOWARD HO-469
Bridge # and name HO107, TIBER ALLEY OVER TIBER RIVER
TOWN AND COUNTRY GREENSVIEW
HOWARD CO. HEALTH RESEARCH CTR.
NORMANDY HGTS.
CHESTNUT HILL ESTATES
CHESTNUT HILL
NORMANDY SHOP. CTR.
21043
GREAT OAKS
THE OAKS
TOWN AND COUNTRY WEST
EXECUTIVE CENTER
NORMANDY WOODS
ELLICOTT CENTER
UNWOOD
CHALFONTE MANOR
RIVER MILLS
CO. OFFICE BLDG.
DIST. COURT
CHAPEL VIEW
OELLA
ROCKWELL
BRAEBROOKE
ELLICOTT CITY
21043
ST. JOHNS MANOR
BRYAN'S MILL
GRAYS LEVEL
PARADISE HILL
PATAPSCO
VALLEY
STATE
PARK
TAYLOR MANOR HOSPITAL
AUTUMN HILL
ESTLEIGH
ELLICOTT MILLS MID. SCH.
STONECREST HILLS
WORTHINGTON PARK (UNDEVELOPED)
WORTHINGTON ELEM. SCH.
ILCHESTER
21063
WHEATFIELD
BRAMPTON HILLS
COLUMBIA HILLS
GARRIAN ORCHARD
WORTHINGTON
KNOLL VIEW PLAZA
CROWDER
COLUMBIA 100 OFFICE
CAMP ILCHESTER
29
40
144
103
100


WEIGHT
LIMIT
30 000
POUNDS

Inventory # HO-669

Name HO107--TIBER ALLEY OVER TIBER RIVER
County/State HOWARD | MD
Name of Photographer DAVID DIEHL
Date 2/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING NORTH

Number 1 2 of 3 3


SIDE STREETS
SIDE STREETS
SUNDAY BRUNCH

Inventory # HO-669

Name HO107-TIBER ALLEY OVER TIBER RIVER
County/State HOWARD / MD
Name of Photographer DAVID DIEHL
Date 2/95

Location of Negative SHA

Description NORTH APPROACH LOOKING SOUTH

Number 2 of 3

Inventory # HO-669

Name HO107-TIBER ALLEY OVER TIBER RIVER
County/State HOWARD / MD
Name of Photographer DAVID DIEHL
Date 2/95

Location of Negative SHA

Description EAST ELEVATION LOOKING NORTHWEST

#3 3
Number ~~1~~ of ~~30~~